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yiaX2 prmA PE6 PK1 prmB PE1	MNITSNSTTKDIPRQRWLRIIPPILITCIISYMDRVNIAFAMPGGMDA MQKSQPGTRWFRIIVPILIACIMSFMDRVNISFALPGGMEQ MNTASVSVTQSQAIPKLRWLRIVPPILITCIISYMDRVNIAFAMPGGMDD MNSSTN-ATKRWWYIMPIVFITYSLAYLDRANFSFASAAGITE MNTSRKLPVKRWWYLMPVIFITYSLAYLDRANYGFAAASGIEA MNSSTN-ATKRWWYIMPIVFITYSLAYLDRANFSFASAAGITE *. ********
yiaX2	DLGISATMAGLAGGIFFIGYLFLQVPGGKIAVHGSGKKFIGWSLVAWAVI
prmA	DLLMSSQMAGVVSGIFFIGYLFLQVPGGHIAVRGSGKRFIAWSLVAWAVV
PE6	ELGITASMAGLAGGIFFIGYLFLQVPGGKLAVYGNGKKFIGWSLLAWAVI
PK1	DLGITKGISSLLGALFFLGYFFFQIPGAIYAERRSVRKLIFICLILWGAC
prmB	DLGISRGTSSLIGALFFLGYFIFQVPGAIYAVKRSVRKLVFTSLLLWGFC
PE1	DLGITKGISSLLGALFFLGYFFFQIPGAIYAERRSVRKLIFICLILWGAC
	*
yiaX2	SVLT-GLITNQYQLLALRFLLGVAEGGMLPVVLTMISNWFPDAERGRANA
prmA	SVIT-GETTING TO CHARREST BEGIND FOR THE SNWFF BAERGRANA SVAT-GFVTHOYOLLILR FALGV SEGGMLPVVLTMV SNWFPEKELGRANA
PE6	SVLT-GLVTNOYOLLFLRFALGRFRSGMLRWVLTMISNWFPDKERGRANA
PK1	ASLDRDGAQYSRAGRAIRFILGVVEAAVMPAMLIYISNWFTKSERSRANT
prmB	AA-ATGLISNIPALMVIRFVLGVVEAAVMPAMLIYISNWFTRQERSRANT
PE1	ASLDRDGAQYSSAGWRSVLFSAVVEAAVMPAMLIYISNWFTKSERSRANT
	* **** * ***
yiaX2	IVIMFVPIAGIITAPLSGWIITVLDWRWLFIIEGLLSLVVLVLWAYTIYD
prmA	FVMMFAPLGGMITAPVSGWIIALLDWRWLFIIEGLLSVVVLAVWWLMVSD
PE6	IVIMFVPIAGILTAPLSGWIITAWDWRMLFLVEGALSLVVMVLWYFTISN
PK1	FLILGNPVTVLWMSVVSGYLIQAFGWREMFIIEGVPAVIWAFCWWVLVKD
prmB PE1	FLVLGNPVTVLWMSIVSGYLINAFGWREMFIFEGVPALIWAIFWWFIVRD
PEI	FLILGNPVTVLWMSVVSGYLIQSFGWREMFIIEGVPAVLWAFCWWVLVKV
yiaX2	RPQEARWISEAEKRYLVETLAAEQKAIAG-TEVKNASLSAVLSDKTMWQL
prmA	RPEDARWLPAAEREYLLREMARDKAERSKLPPISHAPLQEVFHNPGLMKL
PE6	RPQEAKRISQAEKDYLIKTLHDEQLLIKG-KTVRNASLRRVLGDKIMWK-
PK1	KPSQVNWLAESEKAALQEQLEREQQGIKPVRNYGEAFRSRNVVLL
prmB	KPEQVSWLTETEKQQLASAMAEEQQAIPPMRNVPQALRSRNVVVL
PE1	KPSQVNWLSENEKAALQAQLESEQQGIKAVRNYGEAFRSRNVILL
	* * *

yiaX2 prmA PE6 PK1 prmB PE1	IALNFFYQTGIYGYTLWLPTILKELTHS-SMGQVGMLAILPYVGAIAGMF VILNFFYQTGDYGYTLWLPTIIKNLTGA-SIGNVGLLTVLPFIATLSGIYFFYQTGIYGYTLWLPTILKGLTNG-NMEQVGMLAILPYIGAIFGML CMQYFAWSIGVYGFVLWLPSIIRSGGENMGMVEVGWLSSVPYLAATIAMI CLLHALWSIGVYGFMMWMPSILRSAA-SMDIVRVGWLAAVPYLAAIITML CMQYFAWSIGVYGFVLWLPSIIRSGGVNMGMVEVGWLSSVPYLAATIAMI * ***.*.*
yiaX2	LFSSLSDRTGKRKLFV-CLPLIGFALCMFLSVALKNQIWLSYAALVGCGF
prmA	VVSYLSDKTGKRRQWV-MISLFCFAACLLASVLLREFVLAAYLALVACGF
PE6	IISTLSDRTGKRKVFV-ALPLACFAICMALSVLLKDHIWWSYAALVGCGV
PK1	VVSWASDKMQNRKLFVWPLLLIAVFAFIGSWAVGANLSWVSYTLLVIAGA
prmB	VISWLSDKTGLRRLFIWPLLLIASVTFFGSWLLGSYSFWFSYGLLVLAAA
PE1	VVSWASDKMQNRKLFVWPLLLIGGLAFIGSWAVGANHFWASYTLLVIANA
yiaX2	FLOSAAGVFWTIPARLFSAEMAGGARGVINALGNLGGFCGPYAVGVLITL
prmA	FLKAATSPFWSIPGRIAPPEAAGSARGVINGLGNLGGFCGPWLVGLMIYL
PE6	FTQAAAGVFWTIPPKLFNAEMAGGARGVINALGNLGGFCGPYMVGVLITL
PK1	AMYAPYGPFFAIIPEMLPRNVAGGAMALINSMGALGSFFGSWFVGYLNGT
prmB	CMYAPYGPFFALIPELLPKNVAGISIGLINCCGALGAFAGAWLVGYLNGL
PE1	AMYAPYGPFFAIIPEMLPRNVAGGAMALINSMGALGSFFGSWFVGYLNGT
•	
yiaX2	YSKDAGVYC-LAISLALAALMALLLPAKCDAGAAPVKTINPHKRTA-
prmA	YGONAAVVT-LAGSLIIAGIIAALLPTQCDLRPAEARQONFTPRIHDAK
PE6	FSKDVGVYS-LAVSLASASVLALMLPNRCDQKAGAE-
PK1	TGSPSASYIFMGVALFVSVWLTLIVKPANNQKLPLGARHA
prmB	TGGPGASYTFMAIALLVSVGLVFFLKVPSGNLVTRRLLKGDAK
PE1	TGSPSASYIFMGVALFASVWLTLIVKPANNOKLPIGARHA

Fermentative Production of 2-KLG

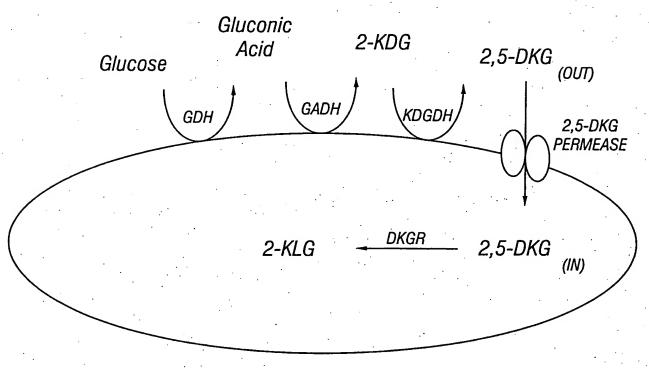


FIG. 2

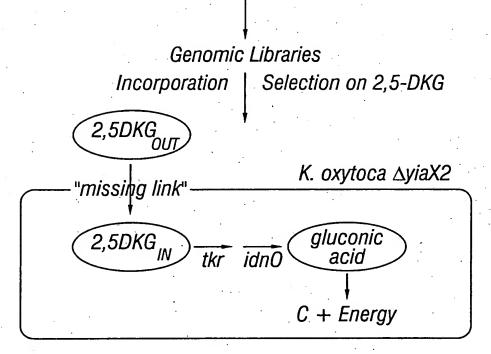


FIG. 3